PATENT COOPERATION TREATY

	From the INTERNATIONAL SEARCHING AUTHORITY						
	To: JANE MASSEY LICATA LICATA & TYRRELL P.C.		PCT				
	66 E. MAIN STREET MARLTON, NJ 08053		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHOR ITY				
			(PCT Rule 43bis.1)				
			Date of mailing (day/month/year) 24 IIIN 2015				
	pplicant's or agent's file reference		FOR FURTHER ACTION See paragraph 2 below				
	DC-0270	T 1 C1'	(1 (Priority date (day/month/year)			
,	International application No.	International filing date (14 October 2004 (14.10.2)		15 October 2003 (15.10.2003)			
	PCT/US04/33874 International Patent Classification (IPC) of	or both national classificati	on and IPC	15 October 2005 (15.10.2005)			
	IPC(7): A61K 38/00 and US Cl.: 514/2 Applicant						
	TRUSTEES OF DARTMOUTH COLLE	**					
	1. This opinion contains indications relating to the following items:						
	Box No. I Basis of the opinion						
	Box No. II Priority						
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
	Box No. IV Lack of unity of invention						
	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
	Box No. VI Certain documents cited						
	Box No. VII Certain defects in the international application						
	Box No. VIII Certain observations on the international application						
	2. FURTHER ACTION						
	If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.						
	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.						
	For further options, see Form PCT/ISA/220.						
	3. For further details, see notes to Form PCT/ISA/220.						
	Name and mailing address of the ISA/ US	·····	Authorized office	1 (Juneleh Bhahan			
	Mail Stop PCT, Attn. ISA/US		B. Dell Chism	The state of the s			
	Commissioner for Patents P.O. Box 1450						
	Alexandria, Virginia 22313-1450		Telephone No. (5	71) 272-1600			

Facsimile No. (703) 305-3230
Form PCT/ISA/237 (cover sheet) (January 2004)

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PCT/US04/33874

International application No.

Box No I Ross	is of this opinion					
DUX NO. 1 Dasi	S VI LID OPINION					
 With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. 						
which is	nion has been established on the basis of a translation from the original language into the following language, the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).					
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:						
a. type of	material					
a	sequence listing					
ta	ble(s) related to the sequence listing					
b. format	of material					
in in	written format					
in in	computer readable form					
c. time of	filing/furnishing					
co	ontained in international application as filed.					
fi	led together with the international application in computer readable form.					
☐ fu	rnished subsequently to this Authority for the purposes of search.					
or firm	ion, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed shed, the required statements that the information in the subsequent or additional copies is identical to that in the ion as filed or does not go beyond the application as filed, as appropriate, were furnished.					
4. Additional comments:						
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International application No. PCT/US04/33874

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1. Statement						
Novelty (N)	Claims 1-14	YES				
novely (1)	Claims NONE	NO				
Inventive step (IS)	Claims 1-14	YES				
involuve step (15)	Claims NONE	NO				
Industrial applicability (IA)	Claims 1-14	YES				
musurar approachity (11.1)	Claims NONE	NO				

2. Citations and explanations:

Claims 1-14 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the isolated protein factor of Pseudomonsa aeruginosa for the claimed methods of modulating plasma membrane expression of ABC transmembrane proteins.

Claims 1-14 meet the criteria set out in PCT Article 33(4), and thus claims 1-14 have industrial applicability because the subject matter claimed can be made or used in industry.